

ABSTRACT OF THE DISCLOSURE

1
2 An arrangement is disclosed for generating a coarse level mesh representing a surface, from
3 a finer level mesh surface representation. The arrangement includes an indicator value generator and
4 a coarse level mesh generator. The indicator value generator, for respective ones of the points in the
5 finer level mesh surface representation, evaluates an indicator function, the value indicating whether
6 a subdivision-inverse filter methodology or a least-squares optimization methodology is to be used
7 to determine a position for the corresponding point in the coarse level mesh representation. The
8 coarse level mesh generator determines, for each of the points that is to be provided in the coarse
9 level mesh representation, a position in response to the position of the corresponding point in the
10 finer level mesh representation, in accordance with the one of the subdivision-inverse filter
1 methodology and least-squares optimization methodology indicated by the indicator value generated
2 by the indicator value generator.